

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 19 JUL 2004

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Applicant's or agent's file reference BIE006373/MR	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/B 02/02306	International filing date (day/month/year) 19.04.2002	Priority date (day/month/year) 19.04.2002
International Patent Classification (IPC) or both national classification and IPC H04L12/56		
Applicant TELEFONAKTIEBOLAGET L M ERICSSON et al.		



- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 14.02.2003	Date of completion of this report 16.07.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Forster, G Telephone No. +49 89 2399-8986 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 02/02306**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-13 as originally filed

Claims, Numbers

1-15 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-15
	No: Claims	
Inventive step (IS)	Yes: Claims	1-15
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB02/02306

to section V.

1. The present invention relates to a proxy for at least one end-to-end data flow in a network, to a node in a wireless network, to a method for proxying at least one end-to-end data flow in a network and to a computer program product, according to the features of the four independent claims 1, 6, 8 and 15 respectively.
2. The cited documents in the international search report do not appear to get closer to the subject-matter of the independent claims than the documents already acknowledged by the applicant.
3. According to the features of the independent claims the inventive step consists in that the proxy comprises an estimation unit, for estimating a current minimum data load necessary to occupy a bandwidth available to the end-to-end data flow in the network, said estimation unit outputting a flow's pipe capacity estimation; a comparison unit, for comparing said estimated pipe capacity with a predetermined capacity threshold; a decision unit, for deciding to proxy said flow if said estimated pipe capacity lies above said capacity threshold and a routing unit, for routing said flow according to the decision. This makes it possible to reduce the processing load of the host running the proxy, by only proxying those end-to-end connections for which a margin for performance improvement exists, while routing connections for which the effort of proxying is not justified by the potential benefit without proxying towards the end-points

The underlying concept is not disclosed in or rendered obvious by the cited prior art documents. The subject-matter of the independent claims thus fulfils the requirements of Article 33 PCT.

4. The dependent claims contain further details on the subject-matter of the respective independent claims. These dependent claims merely limit the scope of protection sought by the independent claims and are therefore also considered to fulfil the requirements of Article 33 PCT.